UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,773	03/07/2002	Martin L. Tanaka	E20020020	8731

7590 07/29/2003

Michael M. Rickin, Esq.
ABB Inc.
Legal Department - 4U6
29801 Euclid Avenue
Wickliffe, OH 44092-1898

EXAMINER
DICKENS, CHARLENE

ART UNIT	PAPER NUMBER
2855	

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	10/092,773	TANAKA, MARTIN L.	
	Examiner	Art Unit	
	Ex. Dickens	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

The title of the invention is still not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants are informed, in regards to all asserted claim rejections, the preamble of claims 28-30 are given patentable weight because: the preamble language provides antecent basis for terms in the body of the claim; absent the preamble, the remaining claim language set out the complete invention; the preamble provides more than a statement of purpose or intended use; and the preamble language is essential to understanding the limitations in the claims. The *original* written description does not describe first and second flow restrictors through which the fluid must flow in its entirely. The applicant states the amendments are fully supported, for the above limitation, by the application as filed as the drawing Figs. 2, 5-8 all show the sealed chamber with no means by which the fluid cannot flow in its entirety through the chamber. It appears the claimed limitation and the applicant's aforementioned comments are contradictory to each other. The contradiction is the

original disclosure describes restrictors 22 and 24 prohibit the fluid from flowing in its entirety. Whereas the claimed limitation recites the fluid must flow in its entirety. Clarification is needed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In regards to claims 1, 11, 16, 19, 26, 28, and 29, it is not clear at what reference point does the fluid flow in its entirety. Specifically, at what stage of the flow does the fluid flow in its entirety? Before or after restrictor 22, after restrictor 24? Also, the recitation "its" is ambiguous. What is the recitation in reference to?

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-13, 16, 18-20, 23, and 26-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Fassbinder. As best understood, Fassbinder discloses, in regards to claims 1, 11, 16, 18-20, 26 and 28-30, in combination: an analytical instrument/flow sensor or a method of detecting the flow of fluid (Figs. 1, 2) comprising flowing purging fluid (col. 2, lines 32-36) into an enclosure, it is inherent the instrument

in encased, having an opening through which a fluid can flow; first and second differential pressure switches (31, 33); a sealed chamber 24 in said opening, said chamber having an outlet and comprising: first and second restrictors (21, 22) through which said fluid must flow in its enitrety; and means for transferring/monitoring the pressure in said sealed chamber to said first and second differential pressure switches, transferring/montoring the pressure in said enclosure to said first switch and transferring the pressure at said sealed chamber outlet to said second switch; determining that either said first or second restrictors are blocked when second or said first switches, respectively, are open when said purging fluid flows (col. 2, lines 44-68 thru col. 3, lines 1-3); and determining there is not leakage out of said enclosure in another location if both of said differential pressure switches are closed (col. 1, lines 39-58).

Claim 2: Fassbinder discloses the first and second differential pressure switches are inside the enclosure, again it is inherent the the instrument/flow sensor is encased;

Claims 3-5, 12,13, and 27: Fassbinder discloses wherein said means for transferring are tubes (20, 23, 25, 38);

Claim 8, 23: Fassbinder discloses wherein the sealed chamber outlet vents to atmosphere, i.e., outside of the measuring system, and said sealed chamber outlet pressure is the pressure of said atmosphere, this is inherent since the outlet vents to the atmosphere (Figs. 1,2);

Claims 9, 10: Fassbinder discloses wherein each of said first and second differential pressure switches have a predetermined actuation pressure and each of said first and

second restrictors have a resistance to flow (col. 2, lines 48-68 through col. 3, lines 1-24).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6, 14, 21, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fassbinder in view of Allan. Claims differ from Fassbinder above with the recitations of: first and second differential pressure switches are connected in series and specifically each of the first and second differential pressure switches have a predetermined actuation pressure and each of the first and second restrictors have a resistance to flow selected so that the pressure drop across said first restrictor for a given rate of fluid flow through the first restrictor matches the predetermined actuation pressure of the first switch and the pressure drop across the second restrictor for a given rate of fluid flow through the second restrictor matches the predetermined actuation pressure of the second switch. Allan discloses, in Figs. 3 and 6, a connection circuitry, i.e., serial, of first and second differential pressure switches (P1-P3) (as recited in claims 6, 14, 21) and specifically in regard to claims 24 & 25, each of the first and second differential pressure switches have a predetermined actuation pressure and each of the first and second restrictors have a resistance to flow selected so that the

pressure drop across said first restrictor for a given rate of fluid flow through the first restrictor matches the predetermined actuation pressure of the first switch and the pressure drop across the second restrictor for a given rate of fluid flow through the second restrictor matches the predetermined actuation pressure of the second switch (col. 6, lines 11-66 through col. 8, lines 1-49) for the purpose of providing a flow monitoring apparatus in which there are no moving parts and which is based on the venturi principle. It would have been obvious to one of ordinary skill in the art to have a connection circuitry, i.e., serial, of first and second differential pressure switches and specifically each of the first and second differential pressure switches have a predetermined actuation pressure and each of the first and second restrictors have a resistance to flow selected so that the pressure drop across said first restrictor for a given rate of fluid flow through the first restrictor matches the predetermined actuation pressure of the first switch and the pressure drop across the second restrictor for a given rate of fluid flow through the second restrictor matches the predetermined actuation pressure of the second switch in Fassbinder as suggested by Allan for the purpose of providing a flow monitoring apparatus in which there are no moving parts and which is based on the venturi principle.

Claims 7, 15, 17, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fassbinder in view of Dimeff. Claims differ from Fassbinder above with the recitation of a sealed chamber outlet is threaded for attachment to an outlet pipe. Dimeff discloses a sealed chamber outlet 24 is threaded 28 for attachment to an outlet pipe for the purpose of providing appropriate upstream and downstream points for

sampling the air flow pressure in a measuring device. It would have been obvious to one of ordinary skill in the art to have a sealed chamber outlet is threaded for attachment to an outlet pipe in Fassbinder as suggested by Dimeff for the purpose of providing appropriate upstream and downstream points for sampling the air flow pressure in a measuring device.

Applicant's arguments with respect to claims 1-30 have been considered and which are deemed to be addressed by the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ex. Dickens or the supervisor, Edward Lefkowitz, whose telephone numbers are 703-305-7047 or 305-4816, respectively. The fax phone

numbers are 703-305-3432 and 703-305-3431. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

Cd/dickens
July 24, 2003

EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800